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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/276,455	03/25/1999	ALAN ROY FERSHT	674508-2001	2127

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EXAMINER

FIELDS, IESHA P

ART UNIT PAPER NUMBER

1645

DATE MAILED: 01/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/276,455

Applicant(s)

FERSHT ET AL.

Examiner

Iesha P Fields

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 22-28 and 32-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 29-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 51-54 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Applicants amendment received December 12, 2001 has been received and entered. Claims 1 and 12-13 were amended and new claims 51-54 were added.

Response to Amendment

The text of those sections of Title 35 U.S. Code not included in this action can be found in a prior Office Action.

Election/Restrictions

Newly submitted claims 51-54 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The claims recite an hsp chapereronin protein. Each identified hsp chapereronin is a separate invention. Since the applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 51-54 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

1. Claim 1 rejected under 35 U.S.C. 112, first paragraph, is **withdrawn** in view of Applicants amendment to the claim.
2. Claims 1, 9-11, 14-21, and 29-31 rejected under 35 U.S.C. 112, second paragraph, is **withdrawn** in view of Applicants amendment to the claims.

Claim Rejections - 35 USC § 102

3. Claims 1 and 9-17 rejected under 35 U.S.C. 102(b) as being anticipated by Braig et al. is **withdrawn** in view of Applicants amendment to the claims.

Claim Rejections - 35 USC § 103

4. Claims 1-21 and 29-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Braig et al. in view of Holland et al. is **maintained**.

Applicant's have asserted that Braig et al. does not teach of "fragments of GroEL" that have chaperone activity. Applicant's have further asserted that one of skill in the art would not be motivated to make a recombinant *E. coli* GroEL fusion polypeptide.

Applicant's arguments have been fully and carefully considered and they are not deemed to be persuasive.

The claims are drawn to GroEL polypeptides.

As stated previously, Braig et al. disclose the entire amino acid sequence of *E. coli* GroEL (including fragments). Braig et al. further teach that chaperons are large multisubunit assemblies essential in mediating ATP-dependent polypeptide chain folding. Braig et al. does not teach of a recombinant *E. coli* GroEL fusion polypeptide however, as the Applicant has indicated in the response, Holland et al. teach of a process of making recombinant fusion polypeptides including polypeptides of bacterial origin.

Given that 1) Braig et al. has taught of the entire amino acid sequence of *E. coli* GroEL and that 2) Holland et al. has taught of a process of making a recombinant fusion polypeptide it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to identify fragments of GroEL that have chaperone activity and further use the polypeptide as a diagnostic tool in the treatment of disease. One would have been motivated to identify such polypeptides in view of the teachings of Holland et al. that such polypeptides may be useful in diagnostic assays.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

For the above reasons, it is believed that the rejections should be sustained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iesha P Fields whose telephone number is (703) 605-1208. The examiner can normally be reached on 7am-3:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (703) 308-3909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Ilesha Fields

January 14, 2002



MARK NAVARRO
PRIMARY EXAMINER